

REMARKS

Examiner has rejected claims 1, 2, 4, 6, 7, 9 through 11, 13 through 16, 18 through 20, 22 through 25 and 27 under 35 U.S.C. § 102.

Examiner has allowed claims 8, 17 and 26.

Rejection citing Jacobson

Examiner has rejected claims 1, 2, 5 through 7, 9 through 11, 14 through 16, 18 through 20, 23 through 25 and 27 under 35 U.S.C. § 102 (b) as being anticipated by USPN 5,696,934 (Jacobsen). Applicant has amended the claims. Applicant respectfully traverses the rejections as to the claims as amended.

Criteria for a Rejection under 35 U.S.C. § 102

The criteria for a rejection under 35 U.S.C. § 102 has been clearly defined by the courts and confirmed by the U.S. Patent and Trademark Office. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."

Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Below, Applicant points out subject matter within each independent claim that is not disclosed by Jacobson. On the basis of this, Applicant believes all the claims are patentable over Jacobson.

Discussion of Independent Claim 1

Claim 1 sets out a computing system having data storage. The data storage includes a single hard disk having a plurality of storage segments. The storage segments have different data protection levels. Data are stored in the plurality of storage segments based on data reliability requirements. This is not disclosed by Jacobson.

Jacobson has to do only with systems with multiple storage disks. Specifically, Jacobson relates to hierarchic disk array data storage systems, and methods for utilizing storage disks of differing capacity in a single storage volume in such systems. See Jacobson, at column 1, lines 11 through 16. All of the systems disclosed in Jacobson employ multiple storage disks. See for example column 2, lines 33 through 59. Jacobson does not disclose a single hard disk having a plurality of storage segments, the storage segments having different data protection levels, as set out in claim 1.

Discussion of Independent Claim 10

Claim 10 sets out a data storage system that includes a single hard disk having a plurality of storage segments. The storage segments have different data protection levels. A controller stores data in the plurality of storage segments based on data reliability requirements. This is not disclosed by Jacobson.

Jacobson has to do only with systems with multiple storage disks. Specifically, Jacobson relates to hierarchic disk array data storage systems, and methods for utilizing storage disks of differing capacity in a single storage volume in such systems. See Jacobson, at column 1, lines 11 through 16. All of the systems disclosed in Jacobson employ multiple storage disks. See for example column 2, lines 33 through 59. Jacobson does not disclose a single hard disk having a plurality of storage segments, the storage segments having different data protection levels, as set out in claim 10.

Discussion of Independent Claim 19

Claim 19 sets out a method for storing data. In step (a) of claim 19, the data is stored in a single hard disk that has a plurality of storage segments. The plurality of storage segments have different data protection levels. This is not disclosed by Jacobson.

Jacobson has to do only with systems with multiple storage disks. Specifically, Jacobson relates to hierarchic disk array data storage systems, and methods for utilizing storage disks of differing capacity in a single storage volume in such systems. See Jacobson, at column 1, lines 11 through 16. All of the systems disclosed in Jacobson employ multiple storage disks. See for example column 2, lines 33 through 59. Jacobson does not disclose storing data in a single hard disk having a plurality of storage segments, the storage segments having different data protection levels, as set out in claim 19.

Rejection citing McConnell

Examiner has rejected claims 4, 13 and 22 under 35 U.S.C. § 102 (e) as being anticipated by USPN 6,216,248 (McConnell). Applicant respectfully traverses the rejections.

Criteria for a Rejection under 35 U.S.C. § 102

The criteria for a rejection under 35 U.S.C. § 102 has been clearly defined by the courts and confirmed by the U.S. Patent and Trademark Office. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."

Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Below, Applicant points out subject matter within each independent claim that is not disclosed or suggested by McConnell. On the basis of this, Applicant believes all the claims are patentable over McConnell.

Discussion of Independent Claim 4

Claim 4 sets out that within a computing system, different data protection levels are achieved by implementing storage segments with different data protection levels using different types of storage media. This is not disclosed or suggested by McConnell. In McConnell, all the data is stored in the first data

area. See column 4, lines 10 through 13. Thus all the data in McConnell is stored in memory of the same type. McConnell does not disclose or suggest implementing storage segments with different data protection levels using different types of storage media, as set out in claim 4 of the present case.

Examiner has argued, "the Examiner can reasonably elect to implement one region in as highly unreliable DRM, with the other being highly reliable EEPROM." See the Office Action mailed November 4, 2004, at page 6, last paragraph. The issue, however, is not what Examiner can implement, but what McConnell discloses.

McConnell discloses that an integrated memory has two modes of operation and at least two memory areas. See column 1, lines 53 through 55. McConnell specifically states: "The integrated memory according to the invention may, for example, be a DRAM, an SRAM, an EPROM *or* any other desired type of integrated memory." Column 2, lines 14 through 16 (emphasis added). Examiner appears to be reading the "*or*" as an "*and*". McConnell teaches the integrated memory is made of, for example DRAM *or* EPROM. McConnell does not disclose or suggest the integrated memory is made of *both* DRAM *and* EPROM. Further, McConnell does not disclose or suggest different data protection levels are achieved by implementing storage segments with different data protection levels using different types of storage media. This is taught only by Applicant and is not disclosed or suggested by McConnell.

Discussion of Independent Claim 13

Claim 13 sets out that within a data storage system, different data protection levels are achieved by implementing storage segments with different data protection levels using different types of storage media. This is not disclosed or suggested by McConnell. In McConnell, all the data is stored in the first data area. See column 4, lines 10 through 13. Thus all the data in McConnell is stored in memory of the same type. McConnell does not disclose or suggest implementing storage segments with different data protection levels using different types of storage media, as set out in claim 13 of the present case.

Examiner has argued, "the Examiner can reasonably elect to implement one region in as highly unreliable DRM, with the other being highly reliable EEPROM." See the Office Action mailed November 4, 2004, at page 6, last paragraph. The issue, however, is not what Examiner can implement, but what McConnell discloses.

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different data protection levels using different types of storage media. This is taught only by Applicant and is not disclosed or suggested by McConnell.

Discussion of Independent Claim 22

Claim 22 sets out a method for storing data. Within claim 22, different data protection levels are achieved by implementing storage segments with different data protection levels using different types of storage media. This is not disclosed or suggested by McConnell. In McConnell, all the data is stored in the first data area. See column 4, lines 10 through 13. Thus all the data in McConnell is stored in memory of the same type. McConnell does not disclose or suggest implementing storage segments with different data protection levels using different types of storage media, as set out in claim 22 of the present case.

Examiner has argued, "the Examiner can reasonably elect to implement one region in as highly unreliable DRAM, with the other being highly reliable EEPROM." See the Office Action mailed November 4, 2004, at page 6, last paragraph. The issue, however, is not what Examiner can implement, but what McConnell discloses.

McConnell discloses that an integrated memory has two modes of operation and at least two memory areas. See column 1, lines 53 through 55. McConnell specifically states: "The integrated memory according to the invention may, for example, be a DRAM, an SRAM, an EPROM *or* any other desired type of integrated memory." Column 2, lines 14 through 16 (emphasis added). Examiner appears to be reading the "*or*" as an "*and*". McConnell

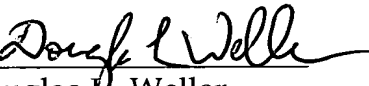
teaches the integrated memory is made of, for example DRAM *or* EPROM. McConnell does not disclose or suggest the integrated memory is made of *both* DRAM *and* EPROM. Further, McConnell does not disclose or suggest different data protection levels are achieved by implementing storage segments with different data protection levels using different types of storage media. This is taught only by Applicant and is not disclosed or suggested by McConnell.

Conclusion

Applicant believes this Amendment has placed the present case in condition for allowance and favorable action is respectfully requested.

Respectfully submitted,

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